Fridley Naval Industrial Reserve Ordnance Plant — NPL

Size: 82.6 acres
Mission: Design and manufacture advanced weapons systems
HRS Score: 30.83; placed on NPL in November 1989
IAG Status: Federal Facility Agreement signed in March 1991
Contaminants: Petroleum/oil/lubricants and VOCs
Media Affected: Groundwater and soil
Funding to Date: $27.9 million
Estimated Cost to Completion (Completion Year): $33.3 million (FY2019)
Final Remedy in Place or Response Complete Date for All Sites: FY2009

Fridley, Minnesota

Restoration Background

Investigations conducted at this government-owned, contractor-operated installation between FY83 and FY88 identified trichloroethene (TCE) in groundwater. The facility was placed on the National Priorities List (NPL) in FY90 because of the TCE contamination in the groundwater, which discharges into the Mississippi River upstream from the Minneapolis drinking water plant.

Site types at the installation include waste disposal pits and trenches, source areas beneath the main industrial plant, a foundry core butt disposal area, and sitewide groundwater contamination. Wastes and contaminants associated with these site types include petroleum/oil/lubricants, solvents, plating sludge, construction debris, and foundry sands.

In FY83, the installation completed Preliminary Assessments and established four sites. A fifth site was established in FY91 for all groundwater, sitewide. The five sites were divided into three operable units (OUs). OU1, Site 5, is the sitewide groundwater. OU2, comprising Sites 1, 2, and 4, includes all source areas outside of the plant buildings. OU3, Site 3, consists of the source areas under the main industrial plant. Sites 1 and 2 have achieved Response Complete status. The remaining OU2 efforts are being conducted under Site 4.

OU1 Feasibility Study activities were completed in FY88, and a Record of Decision (ROD) was signed in FY90. The ROD included a Remedial Action (RA) to provide hydraulic containment and recovery of all future off-site migration of contaminated groundwater. In FY95, the installation initiated a Remedial Design for the groundwater treatment plant. In FY96, it combined OU2 (soil in the unsaturated zone outside the main plant) with OU3 (source contamination beneath the main plant) to effectively manage cleanup.

During FY97, the installation finished removing drums from Site 4, finished the Remedial Investigation (RI) work plan for Site 3, began constructing the groundwater treatment plant, and issued a site management plan. The RA contractor began constructing the groundwater treatment plant before completion of the design to save time and make adjustments in design implementation.

The installation formed a technical review committee in FY93 and converted it to a Restoration Advisory Board (RAB) in FY95. The installation prepared its community relations plan in FY91 and updated the plan in 1997. An administrative record was compiled and an information repository established in FY95. EPA, the Minnesota Pollution Control Agency, and the Navy meet monthly as a formal partnering team. This team developed a plan for screening an off-site area of contaminated groundwater to better understand the impact on the Mississippi River. A Human Health Risk Assessment (HHRA) is being conducted for Site 3 and will be included in the draft RI report.

FY98 Restoration Progress

The installation issued the draft RI report, including the HHRA, for Site 3. The five-year review of the groundwater remedy for Site 5 and the groundwater treatment facility construction were completed. The installation conducted a long-term operations and maintenance optimization study for the groundwater remedy to identify cost savings. The evaluation of residual contamination in Anoka County Park continued throughout FY98, but there was not enough funding to complete the project and further evaluation was deemed necessary. A screening effort to assess residual groundwater contamination in Anoka County Park was completed, and recommendations for addressing the issue were included in the five-year review document for the groundwater remedy. The installation began implementing exit strategies and will continue to work on this project. A preliminary draft strategic exit plan was developed.

The partnering team developed a strategy for evaluating Anoka County Park and received the Certificate of Commendation from the Governor of Minnesota in recognition of successful partnering efforts. The Minnesota Department of Health conducted a Public Health Assessment at the installation. The Site 3 risk assessment was developed, with regulatory input during the early stages of the development. The RAB was briefed on Technical Assistance for Public Participation grants, received copies of all Navy deliverables for review, and conducted site tours of the groundwater treatment facility.

Plan of Action

- Continue to evaluate residual groundwater contamination in Anoka County Park in FY99
- Complete RI for Site 3 (OU3) in FY99
- Begin long-term operations at Site 5 in FY99
- Complete source investigation at Site 3 in FY00 to shorten life cycle of the Site 5 remedy and develop a more efficient extraction system

FY99 Funding by Phase and Relative Risk